

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) A centrifugal fan (~~4, 104, 204, 304, 404~~) that sucks in air from a rotary shaft direction and blows air out in a direction that intersects a rotary shaft (~~41a~~), comprising:

an electric motor (~~41~~) having said rotary shaft;

a main plate (~~43, 143, 243, 343, 443~~) having a cooling air hole (~~43a, 143a, 243a, 343a, 443a~~) and being coupled to and rotationally driven by said rotary shaft;

a plurality of blades (~~44~~) provided on the surface of said main plate on the side opposite an electric motor and at a position on the outer peripheral side of the radial position of said cooling air hole; and

an air guide (~~52, 152, 252, 352, 452~~) that, after a portion of the blown out air has been guided to the vicinity of said electric motor and has cooled said electric motor, guides the air flow so that the revolving direction velocity decreases when blown out from said cooling air hole to the side of said main plate opposite said electric motor.

2. (Currently amended) A centrifugal fan (~~4, 104, 204, 304, 404~~) that sucks in air from a rotary shaft direction and blows air out in a direction that intersects a rotary shaft (~~41a~~), comprising:

an electric motor (~~41~~) having said rotary shaft;

a main plate (~~43, 143, 243, 343, 443~~) having a cooling air hole (~~43a, 143a, 243a, 343a, 443a~~) and being coupled to and rotationally driven by said rotary shaft;

a plurality of blades (~~44~~) provided on the surface of said main plate on the side opposite an electric motor and at a position on the outer peripheral side of the radial position of said cooling air hole; and

an air guide (~~52, 152, 252, 352, 452~~) that, after a portion of the blown out air has been guided to the vicinity of said electric motor and has cooled said electric motor, guides the air flow so that it is blown out toward the side of the main plate in the counter rotational direction when blown out from said cooling air hole to the side of said main plate opposite said electric motor.

3. (Currently amended) The centrifugal fan (~~4, 104~~) as recited in Claim 1 ~~or Claim 2~~, wherein

said air guide (~~52, 152~~) is formed integrated with said main plate (~~43, 143~~).

4. (Currently amended) The centrifugal fan (~~204, 304, 404~~) as recited in Claim 2, further comprising:

a cover (~~246, 346, 446~~) that covers said cooling air hole (~~243a, 343a, 443a~~) from the side opposite the electric motor, and that is provided so that it rotates integrally with said main plate (~~243, 343, 443~~);

wherein,

said air guide (~~252, 352, 452~~) is formed between said cover and said main plate.

5. (Currently amended) The centrifugal fan ~~(204, 304, 404)~~ as recited in Claim 4, wherein

said air guide ~~(252, 352, 452)~~ has a blade shape inclined rearwards in the rotational direction of said cover ~~(246, 346, 446)~~.

6. (Currently amended) The centrifugal fan ~~(204)~~ as recited in Claim 5, wherein

said air guide ~~(252)~~ has a volute blade shape.

7. (Currently amended) The centrifugal fan ~~(204, 304)~~ as recited in ~~any one claim of Claim 4 through Claim 6~~ wherein

said air guide ~~(252, 352)~~ is formed in said cover ~~(246, 346)~~.

8. (Currently amended) An air conditioner ~~(1, 101, 201, 301, 401)~~, comprising:

the centrifugal fan ~~(4, 104, 204, 304, 404)~~ as recited in ~~any one claim of Claim 1 through Claim 7~~;

a heat exchanger ~~(6)~~ arranged on the outer peripheral side of said centrifugal fan; and

a casing ~~(2)~~ that houses said centrifugal fan and said heat exchanger.

9. (New) The centrifugal fan as recited in Claim 2, wherein

said air guide is formed integrated with said main plate.

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10. (New) An air conditioner, comprising:
the centrifugal fan as recited in Claim 2;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan;
and
a casing that houses said centrifugal fan and said heat exchanger.